

Application No. 09/647,946  
Amdt. dated February 10, 2005  
Reply to Office Action of August 13, 2004

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### **REMARKS/ARGUMENTS**

Petition is hereby made under the provisions of 37 CFR 1.136(a) for an extension of three months of the period for response to the Office Action. The Director of the US Patent and Trademark Office is hereby authorized to charge the prescribed fee as indicated in the enclosed Fee Transmittal form.

The Examiner indicated that the priority statement at the beginning of the specification should be amended to reflect the entire priority claim. The statement has been amended to refer to the filing date of the PCT application and to the priority US filing and its current status. It is submitted that the priority statement now is complete.

The Examiner rejected claim 13 under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 has been deleted, thereby obviating the rejection.

The Examiner rejected claims 1 to 15 and 34 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 9 of US Patent No. 6,235,290. Claims 1 to 15 and 34 have been deleted, thereby obviating the rejection.

The Examiner rejected claims 1 to 15 and 34 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 17 of US Patent No. 6,344,202. As noted above, claims 1 to 15 and 34 have been deleted, thereby obviating the rejection.

The Examiner rejected claims 1 to 35 under 35 USC 103(a) as being unpatentable over Baxby et al in view of Dascher et al or Douglas et al or Kaul et al and further in view of Anderson et al and applicant's admission of record.

It was clarified in the prosecution of the parent application that "applicant's admission of record" is the teaching of the specification that a nucleotide

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sequence which encodes a full length MOMP encodes the various domains of the protein. The Examiner considered that the full-length sequence taught by the cited references would comprise at least one of the conserved domains and at least one of the variable domains.

Claims 1 to 15, 34 and 35 have been deleted. Claims 16 and 24 have been amended to recite that the nucleotide sequence encodes a region consisting of at least one of the conserved domains 2, 3 and 5 of MOMP. Claim 25 has been rewritten in independent form, again utilizing consisting of language. New claims 36 to 42 have been added to better protect applicants invention, again using consisting of language.

It will be seen that the consisting language corresponds to that contained in Brunham US Patent No. 6,344,202, which issued on the priority US filing.

As discussed above, applicants vectors are limited to ones containing specific portions only of the MOMP gene. It is submitted that the combination of cited prior art does not disclose or suggest employing only such portions of the gene.

The Baxby reference is concerned with viral vectors. The Dasher et al reference describes the isolation of the entire *omp1* gene from *C. psittaci* and the expression of the MOMP of *E. coli* using a T7 promoter. The Douglas et al reference is concerned with analyzing the P2 promoter of the gene encoding MOMP from *C. trachomatis* MOMP in *E. coli*. There is nothing in any of the references describing the MOMP gene to suggest selecting the specific elements recited in the amended claims, nor that they would be effective.

The Anderson et al reference describes a plasmid, pcDNA3, which contains the cytomegalovirus promoter. The vector is used in Anderson et al in conjunction with a synthetic gene encoding a fragment C of tetanus toxin. The evaluation conducted in Anderson et al provides no indication of any result which

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might be attained using the specific domains recited in applicants amended claims in place of the fragment C.

In the Office Action, the Examiner states:

"The instant claims are directed to nucleotide sequences encoding a region 'which is at least one' of the conserved domains of a MOMP. The specification teaches that a nucleotide sequence which encodes a full-length MOMP protein encodes the various domains the protein, e.g., conserved domains and variable domains (page 4, lines 6-35). Therefore, the full-length gene sequences taught by the cited references would comprise at least one of the conserved domains and at least one of the variable domains."

However, as already indicated, applicants claims are now limited to nucleic acid molecules which consist of the recited domains, thereby excluding the full-length gene sequences described in the cited prior art.

Accordingly, it is submitted that the claims remaining pending in this application are patentable over the applied combination of prior art and hence the rejection of claims 1 to 35, in so far as they remain in the application and in their amended form, under 35 USC 103(a) as being unpatentable over Baxby et al in view of Dascher et al or Douglas et al or Kaul et al and further in view of Anderson et al and applicants admission of record, should be withdrawn.

It is believed that this application is now in condition for allowance and early and favourable consideration and allowance are respectfully solicited.

Respectfully submitted,



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